1907] Cushman,—Primula farinosa, var. macropoda 217

PRIMULA FARINOSA, VAR. MACROPODA ON THE MAINE COAST.

JOSEPH A. CUSHMAN.

WHILE I was collecting on the coast of Maine about Machias Bay in early August my attention was called to the occurrence of a peculiar plant said to be found at the base of the lighthouse on Libby Islands.

It was thought to have been brought there by birds which frequently fly against the lighthouse and are killed. To see what this plant might be I visited the island with Mr. S. N. F. Sanford and found the plant in very considerable numbers. It proved to be *Primula farinosa* L., var. macropoda Fernald. The only places where it occurred were at the base of the lighthouse and the ground about the oil-house nearby. At the time of collecting, the plants were in excellent fruit and certainly seemed thoroughly established. They were growing in loose sandy loam well grassed over. From its appearance it was soil which had been added there by grading and was not in its original position. From the occurrence of the plants it seemed in every way probable that the seeds were brought, as was first told us, by birds coming from farther north. As is well known, many birds are killed by flying

against lighthouses at the various exposed points along the coast. The very limited occurrence about the lighthouse seems to be explained only in this way.

After visiting the island we studied the chart of the region and decided to make a trip to Moose Peak Light on Mistake Island. This is the outer exposed point of the northeastern chain of islands extending out from Jonesport. This was in the direction which birds would probably take in migration. If the theory of the source of the other station was true it seemed as though the plant should be found there also. A day or two later we visited Mistake Island and were much pleased to find the plant there though the individuals were much fewer in number. It was growing near the light on moist granitic cliffs but in considerable soil. On the same day we also landed at Black Head on the outer part of Head Harbor Island. On the summit were found scattered specimens of the same plant. These were growing in wet grassy spots among the rocks and appeared more likely to be indigenous than in either of the other places visited. It was planned to visit Nash Island still farther to the southwest but time and

Rhodora 218

NOVEMBER

weather conditions prevented our doing so. In all, three stations were discovered for this plant. These are of especial interest as the only other New England station was Mt. Kineo, Moosehead Lake, Maine. Although I collected on Mt. Kineo about three weeks later and made a point of looking for this plant no trace of it was found but I have since been informed by Dr. Kennedy that his specimens were found at the eastern end of the cliffs at a spot I did not reach. From our observations it would seem likely that the plant may be found about the lighthouses still farther to the southwest along the outer points of the Maine Coast.

BOSTON SOCIETY OF NATURAL HISTORY.

NOTEWORTHY PLANTS COLLECTED AT ROQUE BLUFFS, MAINE, IN 1907.

C. H. KNOWLTON.

DURING the past summer I spent several days collecting in Washington County, Maine, mostly in the township of Roque Bluffs. This lies on the coast, 16 miles from Cutler, and 22 from Mt. Desert. The summer climate there is cool and very wet, because the Greenland current washes the shore and causes frequent fogs. The coast is lined with cliffs of volcanic rock, broken by occasional sea-caves, estuaries and beaches. In many places heavy spruce woods come down to the edge of the sea-cliffs, with such typical plants of the . northern mountain woods as Solidago macrophylla, Pursh, and Aspidium spinulosum (O. F. Mueller) Sw. var. dilatatum (Hoffm.) Hook. forma anadenium B. L. Robinson.

Back from the cliffs are numerous and extensive peat-bogs, covered with Picea nigra Link., Eriophorum callitrix Chamisso, Smilacina trifolia Desf., Empetrum nigrum L., Rubus Chamaemorus I., Vaccinium Oxycoccus L., and more common bog plants.

I have not fully explored the region, and the estuaries in particular will probably reward further search. The following species already collected, however, seem worthy of mention.

Elymus mollis Trin. is a common beach grass, growing in the same sandy soil as Ammophila arundinacea, Hostk., -- but not so abundant.